

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0043] of the published application as follows:

- - Another currently preferred embodiment of the present invention provides a molecule herein denoted MSPRO12 comprising a variable light chain (V_L) having SEQ ID NO: [[94]] 87 and a variable heavy chain (V_H) having amino acid SEQ ID NO: [[105]] 98 and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO: [[75]] 68 and SEQ ID NO: [[89]] 82, respectively. - -

Please amend paragraph [0044] of the published application as follows:

- - Another currently preferred embodiment of the present invention provides a molecule herein denoted MSPRO2 comprising a variable light chain (V_L) having SEQ ID NO: [[92]] 85 and a variable heavy chain (V_H) having SEQ ID NO: [[103]] 96 and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO: [[74]] 67 and SEQ ID NO: [[84]] 77. - -

Please amend paragraph [0045] of the published application as follows:

- - A currently most preferred embodiment of the present invention provides a molecule, herein denoted MSPRO59, comprising a variable light chain (V_L) having SEQ ID NO: [[102]] 95 and a variable heavy chain (V_H) having SEQ ID NO: [[113]] 106 having the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO: [[76]] 69 and SEQ ID NO: [[91]] 84, respectively. - -

Please amend paragraph [0047] of the published application as follows:

- - In one embodiment the present invention provides a molecule which binds FGFR3 and blocks ligand-dependent activation of the receptor, comprising V_H-CDR3 and V_L-CDR3 regions having SEQ ID NO: 20 and SEQ ID NO: 21, respectively and the corresponding polynucleotide sequence having SEQ ID NO: 44 and SEQ ID NO: 45, respectively. In another embodiment the present invention provides a molecule comprising a variable light chain (V_L) having SEQ ID NO: [[99]] 92 and a variable heavy chain (V_H) having SEQ ID NO: [[110]] 103, having the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO: [[65]] 58 and SEQ ID NO: [[87]] 80, respectively. - -

Please amend paragraph [0049] of the published application as follows:

- - Additional embodiments of the present invention provide molecules having an antigen binding domain comprising a V_L region and a V_H region, respectively, selected from SEQ ID NO: [[93]] 86 and SEQ ID NO: [[104]] 97; SEQ ID NO: [[95]] 88 and SEQ ID NO: [[106]] 99; SEQ ID NO: [[96]] 89 and SEQ ID NO: [[107]] 100; SEQ ID NO: [[97]] 90 and SEQ ID NO: [[108]] 101; SEQ ID NO: [[98]] 91 and SEQ ID NO: [[109]] 102; SEQ ID NO: [[99]] 92 and SEQ ID NO: [[110]] 103; and SEQ ID NO: [[101]] 94 and SEQ ID NO: [[112]] 105 and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO: [[70]] 63 and SEQ ID NO: [[85]] 78; SEQ ID NO: [[67]] 60 and SEQ ID NO: [[78]] 71; SEQ ID NO: [[64]] 57 and SEQ ID NO: [[79]] 72; SEQ ID NO: [[71]] 64 and SEQ ID NO: [[86]] 79; SEQ ID NO: [[62]] 55 and SEQ ID NO: [[80]] 73; SEQ ID NO: [[65]] 58 and SEQ ID NO: [[87]] 80; and SEQ ID NO: [[69]] 62 and SEQ ID NO: [[83]] 76. - -

Please amend paragraph [0051] of the published application as follows:

- - Another embodiment of the present invention provides a molecule comprising V_H and V_L domains of amino acid sequences having SEQ ID NO: [[111]] 104 and [[100]] 93, which has specific affinity for FGFR1 and which blocks ligand-dependent activation of FGFR1, and the corresponding isolated nucleic acid molecules comprising polynucleotide sequences having SEQ ID NO: [[82]] 75 and SEQ ID NO: [[73]] 66. - -

Please amend paragraph [0093] of the published application as follows:

- - FIG. 28 is an example of a Fab expression vector, having SEQ ID NO: [[53]] 52, for use in accordance with the present invention. - -

Please amend paragraph [0094] of the published application as follows:

- - FIG. 29 is an example of a phage display vector, having SEQ ID NO: [[54]] 53, for use in accordance with the present invention. - -

Please amend paragraph [0095] of the published application as follows:

- - FIG. 30 depicts the polynucleotide sequences of the V_L and V_H of MSPRO antibodies of the present invention SEQ ID NOS: [[61-91]] 54-84. - -

Please amend paragraph [0108] of the published application as follows:

-- The polypeptide sequence of the V_H and V_L domains of the currently preferred embodiments of the present invention are presented below. **FIG. 30** provides the polynucleotide sequences of the preferred embodiments of the invention.

MS-Pro-2-VL (SEQ ID NO: [[92]]85)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD
51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DYSADYVF
101 GTKLTVLGQ

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Please amend paragraph [0109] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[74]]67

MS-Pro-11-VL (SEQ ID NO: [[93]]86)

1 DIALTQPASV SGSPGQSITI SCTGTSSDVG GYNYVSWYQQ HPGKAPKLM
51 YDVSNRPSGV SNRFSGSKSG NTASLTISGL QAEDEADYYC QSHHFYEVFG
101 GGTKLTVLGQ

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Please amend paragraph [0110] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[70]]63

MS-PRO-12-VL (SEQ ID NO: [[94]]87)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD
51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DFDFAVFGGG
101 TKLTVLGQ

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Please amend paragraph [0111] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[77]]68

MS-Pro-21-VL (SEQ ID NO: [[95]]88)

1 DIVMTQSPDS LAVSLGERAT INCRSSQSVL YSSNNKNYLA WYQQKPGQPP
51 KLLIYWASTR ESGVPDRFSG SGSGTDFLT ISSLQAEDVA VYYCQQYDSI
101 PYTFGQGTVK EIKRT

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Please amend paragraph [0112] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[67]] 60

MS-Pro-24-VL (SEQ ID NO: [[96]]89)

1 DIVLTQSPAT LSLSPGERAT LSCRASQSVS SSYLAWYQQK PGQAPRLLIY
51 GASSRATGVP ARFSGSGSGT DFTLTISSL PEDFATYYCQ QMSNYPDTFG
101 QGKVEIKRT

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Please amend paragraph [0113] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[64]] 57

MS-Pro-26-VL (SEQ ID NO: [[97]]90)

1 DIALTQPASV SGSPGQSITI SCTGTSSDVG GYNVYVSWYQQ HPGKAPKLM 51
YDVSNRPSGV SNRFSGSKSG NTASLTISGL QAEDEADYYC QSYDNNSDVV 101
FGGGTKLTVL GQ

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Please amend paragraph [0114] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[71]] 64

MS-Pro-28-VL (SEQ ID NO: [[98]]91)

1 DIQMTQSPSS LSASVGDRVT ITCRASQGIS SYLAWYQQKP GKAPKLLIYA
51 ASSLQSGVPS RFSGSGSGTD FTLTISSLQP EDFAVYYCFQ YGSIPPTFGQ
101 GTKVEIKRT

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Please amend paragraph [0115] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[62]] 55

MS-Pro-29-VL (SEQ ID NO: [[99]]92)

1 DIVLTQSPAT LSLSPGERAT LSCRASQSVS SSYLAWYQQK PGQAPRLLIY
51 GASSRATGVP ARFSGSGSGT DFTLTISSL PEDFATYYCQ QTNNAPVTFG
101 QGKVEIKRT

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Please amend paragraph [0116] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[65]] 58

MS-Pro-54-VL (SEQ ID NO: [[100]]93)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD

51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DYFKLVFGGG

101 TKLTVLGQ

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Please amend paragraph [0117] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[73]] 66

MS-Pro-55-VL (SEQ ID NO: [[101]]94)

1 DIALTQPASV SGSPGQSITI SCTGTSSDVG GYNVYVSWYQQ HPGKAPKLM

51 YDVSNRPSGV SNRFSGSKSG NTASLTISGL QAEDEADYYC QSYDMYNYIV

101 FGGGTVLTVL GQ

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Please amend paragraph [0118] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[69]] 62

MS-Pro-59-VL (SEQ ID NO: [[102]]95)

1 DIELTQPPSV SVAPGQTARI SCSGDALGDK YASWYQQKPG QAPVLVIYDD

51 SDRPSGIPER FSGSNSGNTA TLTISGTQAE DEADYYCQSY DGPDLWVFGG

101 GTKLTVLGQ

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Please amend paragraph [0119] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[76]] 69

MS-Pro-2-VH (SEQ ID NO: [[103]]96)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYYMHWVRQA PGQGLEWMGW 51

INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARDF

101 LGYEFDYWGQ GTLTVVSS

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Please amend paragraph [0120] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[84]] 77

MS-Pro-11-VH (SEQ ID NO: [[104]]97)

1 QVQLVQSGAE VKKPGASVKV SCKASGTYTFT SYYMHWVRQA PGQGLEWMGW 51
INPNSSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARYY
101 GSSLYHYVFG GFIDYWGQGT LTVSS

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Please amend paragraph [0121] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[85]] 78

MS-Pro-12-VH (SEQ ID NO: [[105]]98)

1 QVQLKESGPA LVKPTQLTL TCTFSGFSLS TSGVGVGWIR QPPGKALEWL
51 ALIDWDDDKY YSTSLKTRLT ISKDTSKNQV VLTMTNMDPV DTATYYCARY
101 HSWYEMGYYG STVGYMFDYW GQGTLTVSS

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Please amend paragraph [0122] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[89]] 82

MS-Pro-21-VH (SEQ ID NO: [[106]]99)

1 QVQLVQSGAE VKKPGSSVKV SCKASGGTFS SYAISWVRQA PGQGLEWMGG
51 IIPIFGTANY AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYCARDN
101 WFKPFSDVWG QGTLTVSS

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Please amend paragraph [0123] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[78]] 71

MS-Pro-24-VH (SEQ ID NO: [[107]]100)

1 QVQLVQSGAE VKKPGSSVKV SCKASGGTFS SYAISWVRQA PGQGLEWMGG
51 IIPIFGTANY AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYCARVN
101 HWTYTFDYWG QGTLTVSS

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Please amend paragraph [0124] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[79]] 72

MS-Pro-26-VH (SEQ ID NO: [[108]]101)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYYMHWVRQA PGQGLEWMGW 51

INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARGY

101 WYAYFTYINY GYFDNWGQGT LTVSS

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Please amend paragraph [0125] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[86]] 79

MS-Pro-28-VH (SEQ ID NO: [[109]]102)

1 QVQLVQSGAE VKKPGSSVKV SCKASGGTFS SYAISWVRQA PGQGLEWMGG

51 IIPIFGTANY AQKFQGRVTI TADESTSTAY MELSSLRSED TAVYYCARGG

101 GWVSHGYYYL FDLWGQGTLV TVSS

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Please amend paragraph [0126] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[80]] 73

MS-Pro-29-VH (SEQ ID NO: [[110]]103)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYYMHWVRQA PGQGLEWMGW 51

INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARTW

101 QYSYFYYLDG GYYFDIWGQG TLTVSS

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Please amend paragraph [0127] of the published application as follows:

-- corresponding to polynucleotide sequence having SEQ ID NO: [[87]] 80

MS-Pro-54-VH (SEQ ID NO: [[111]]104)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYYMHWVRQA PGQGLEWMGW 51

INPNSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARNM

101 AYTNYQYVNM PHFDYWGQGT LTVSS

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Please amend paragraph [0128] of the published application as follows:

- - corresponding to polynucleotide sequence having SEQ ID NO: [[82]] 75

MS-Pro-55-VH (SEQ ID NO: [[112]]105)

1 QVQLVQSGAE VKKPGASVKV SCKASGYTFT SYYMHWVRQA PGQGLEWMGW 51

INPNSSGGTNY AQKFQGRVTM TRDTSISTAY MELSSLRSED TAVYYCARS

101 NSTMYWYLRR VLFDHWGQGT LTVSS

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Please amend paragraph [0129] of the published application as follows:

- - corresponding to polynucleotide sequence having SEQ ID NO: [[83]] 76

MS-Pro-59-VH (SEQ ID NO: [[113]]106)

1 QVQLQQSGPG LVKPSQTLSL TCAISGDSVS SNSAAWNWIR QSPGRGLEWL

51 GRTYYRSKWY NDYAVSVKSR ITINPDTSKN QFSQLQLNSVT PEDTAVYYCA

101 RSYYPDFDYW GQGTLTVSS

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Please amend paragraph [0130] of the published application as follows:

- - corresponding to polynucleotide sequence having SEQ ID NO: [[91]] 84 - -

Please amend paragraph [0182] of the published application as follows:

- - The invention also provides isolated nucleic acid molecule that hybridizes under high stringency conditions to polynucleotides having SEQ ID NO:30 through SEQ ID NO:51 and SEQ ID NOS: 62, 64, 65, 67, 69, 71, 73, 76, 78, 80, 82, 87, 89, 91, 55, 57-58, 60, 62-64, 66-69, 71-73, 75-80, 82, 84 or the complement thereof. As used herein, highly stringent conditions are those which are tolerant of up to about 5-20% sequence divergence, preferably about 5-10%. Without limitation, examples of highly stringent (-10° C. below the calculated Tm of the hybrid) conditions use a wash solution of 0.1.times.SSC (standard saline citrate) and 0.5% SDS at the appropriate Ti below the calculated Tm of the hybrid. The ultimate stringency of the conditions is primarily due to the washing conditions, particularly if the hybridization conditions used are those which allow less stable hybrids to form along with stable hybrids. The wash conditions at higher stringency then remove the less stable hybrids. A common hybridization condition that can be used with the highly stringent to moderately stringent wash conditions described above is hybridization in a solution of 6xSSC (or 6xSSPE), 5x Denhardt's reagent, 0.5% SDS, 100 µg/ml

denatured, fragmented salmon sperm DNA at an appropriate incubation temperature Ti. See generally Sambrook et al.[[,]] (Molecular Cloning: A Laboratory Manual, 2d edition, Cold Spring Harbor Press (1989)) for suitable high stringency conditions. - -

Please amend paragraph [0232] of the published application as follows:

- - FIG. 30 displays the polynucleotide sequences of the specific V_L and V_H domains of MSPRO2 (SEQ ID NO: [[74]] 67 and [[84]] 77); MSPRO11 (SEQ ID NO: [[70]] 63 and [[85]] 78); MSPRO12 (SEQ ID NO: [[75]] 68 and [[89]] 82); MSPRO21 (SEQ ID NO: [[67]] 60 and [[78]] 71); MSPRO24 (SEQ ID NO: [[64]] 57 AND [[79]] 72); MSPRO26 (SEQ ID NO: [[71]] 64 AND [[86]] 79); MSPRO28 (SEQ ID NO: [[62]] 55 AND [[80]] 73); MSPRO29 (SEQ ID NO: [[65]] 58 AND [[87]] 80); MSPRO54 (SEQ ID NO: [[73]] 66 AND [[82]] 75); MSPRO55 (SEQ ID NO: [[69]] 62 AND [[83]] 76); and MSPRO59 (SEQ ID NO: [[76]] 69 AND [[91]] 84). The sequences include the framework domains 1-4 and the CDR domains 1-3. SEQ ID NO: [[61]] 54, SEQ ID NO: [[63]] 56, SEQ ID NO: [[66]] 59, SEQ ID NO: [[68]] 61, and SEQ ID NO: [[73]] 65 denote herein the polynucleotide sequences of the parent V_L (kappa or lambda) strands. SEQ ID NO: [[77]] 70, SEQ ID NO: [[81]] 74, SEQ ID NO: [[88]] 81 and SEQ ID NO: [[90]] 83 denote herein the polynucleotide sequences of the V_H parent strands. - -

Please replace TABLE 1F of the published application as follows:

Peptide pairs
fragment

antibody #	V heavy chain CDR3	V light chain CDR3	V heavy chain	V light chain
MSPRO2	SEQ ID NO: 8	SEQ ID NO: 9	SEQ ID NO: 96	SEQ ID NO: 85
MSPRO12	SEQ ID NO: 12	SEQ ID NO: 13	SEQ ID NO: 98	SEQ ID NO: 87
MSPRO59	SEQ ID NO: 24	SEQ ID NO: 25	SEQ ID NO: 106	SEQ ID NO: 95
MSPRO11	SEQ ID NO: 10	SEQ ID NO: 11	SEQ ID NO: 97	SEQ ID NO: 86
MSPRO21	SEQ ID NO: 14	SEQ ID NO: 15	SEQ ID NO: 99	SEQ ID NO: 88
MSPRO24	SEQ ID NO: 16	SEQ ID NO: 17	SEQ ID NO: 100	SEQ ID NO: 89
MSPRO26	SEQ ID NO: 18	SEQ ID NO: 19	SEQ ID NO: 101	SEQ ID NO: 90
MSPRO28	SEQ ID NO: 26	SEQ ID NO: 27	SEQ ID NO: 102	SEQ ID NO: 91
MSPRO29	SEQ ID NO: 20	SEQ ID NO: 21	SEQ ID NO: 103	SEQ ID NO: 92
MSPRO54	SEQ ID NO: 22	SEQ ID NO: 23	SEQ ID NO: 104	SEQ ID NO: 93
MSPRO55	SEQ ID NO: 28	SEQ ID NO: 29	SEQ ID NO: 105	SEQ ID NO: 94

Please replace TABLE 1G of the published application as follows:

Nucleotide pairs
fragment

antibody #	V heavy chain CDR3	V light chain CDR3	V heavy chain	V light chain
MSPRO2	SEQ ID NO: 30	SEQ ID NO: 31	SEQ ID NO: 77	SEQ ID NO: 67
MSPRO12	SEQ ID NO: 34	SEQ ID NO: 35	SEQ ID NO: 82	SEQ ID NO: 68
MSPRO59	SEQ ID NO: 50	SEQ ID NO: 51	SEQ ID NO: 84	SEQ ID NO: 69
MSPRO11	SEQ ID NO: 32	SEQ ID NO: 33	SEQ ID NO: 78	SEQ ID NO: 63
MSPRO21	SEQ ID NO: 36	SEQ ID NO: 37	SEQ ID NO: 71	SEQ ID NO: 60
MSPRO24	SEQ ID NO: 38	SEQ ID NO: 39	SEQ ID NO: 72	SEQ ID NO: 57
MSPRO26	SEQ ID NO: 40	SEQ ID NO: 41	SEQ ID NO: 79	SEQ ID NO: 64
MSPRO28	SEQ ID NO: 42	SEQ ID NO: 43	SEQ ID NO: 73	SEQ ID NO: 55
MSPRO29	SEQ ID NO: 44	SEQ ID NO: 45	SEQ ID NO: 80	SEQ ID NO: 58
MSPRO54	SEQ ID NO: 46	SEQ ID NO: 47	SEQ ID NO: 75	SEQ ID NO: 66
MSPRO55	SEQ ID NO: 48	SEQ ID NO: 49	SEQ ID NO: 76	SEQ ID NO: 62